May 12, 2003

Mr. Charles Hartsell Deercroft Recycling and Disposal Facility 10501 West 300 North Michigan City, Indiana 46360

Re: 091-16944-00067

First Administrative Amendment to

Part 70 T091-7519-00067

Dear Mr. Hartsell:

Deercroft Recycling and Disposal Facility was issued a Part 70 permit on July 12, 1999 for a municipal solid waste landfill. A letter requesting changes was received on March 20, 2003. Additional information was received on March 27, 2003. Pursuant to the provisions of 2-7-11 the permit is hereby administratively amended as follows (all deleted language indicated with strike-out (strike-out) and new language indicated with bold (bold) type):

- 1. This modification consists of replacing one (1) damaged flare with a capacity of 30 MMBtu per hour, constructed in 1994 with one (1) new 49.0 MMBtu per hour, 1,362 scfm temporary open flare, constructed in 2003, to the existing landfill site. Upon selection of the replacement flare for the damaged flare the proper permits for construction and operation shall be submitted and the one (1) new 49.0 MMBtu per hour, 1,362 scfm temporary open flare shall be removed upon completion of the installation of the approved replacement flare. This modification is being processed as an Administrative Amendment due to this process has been previously permitted in Minor Source Modification 091-16642 and Significant Permit Modification 091-17127 and per Emergency Provisions as listed in the Part 70 Section B.13. Pursuant to condition B.13 of Part 70 Permit T091-7519-00067, this flare shall operate no longer than the minimum time required to properly permit a replacement flare.
- 2. The Permittee is requesting to allow Gas Well #55 to operate at temperatures higher than 55° C (131° F), the maximum temperatures specified in Condition D.1.5(c), pursuant to 40 CFR 60.753(c) Operational Standards for Collection and Control Systems. Pursuant to 40 CFR 60.753(c) and Condition D.1.5(c), the Permittee may establish a higher operating temperature for a particular well, if the higher temperature does not cause fires or significantly inhibit anaerobic decomposition by killing methanogens.

The changes to the permit language are as follows:

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source consists of the following emission units:

(a) One (1) solid waste disposal facility having the meaning described in 40 CFR 60.751 pertaining to all contiguous land and structures, other appurtenances (including haul roads), and improvements on the land used for disposal of solid waste that opened in 1980 and has a design capacity of 8,257,892 Megagrams.

- (b) One (1) flare with a capacity of 30 MMBtu per hour, constructed in 1994. Removed from service.
- (c)(b) Three (3) landfill gas fueled reciprocating engine/generator sets rated at 1138 break horsepower each, installed in 1994, and one (1) landfill gas fueled reciprocating engine/generator set rated at 1138 break horsepower, installed in 2001.
- (d)(c) One (1) open flare, with a maximum heat input capacity of 65.1 MMBtu per hour and the flow rate of 2,130 standard cubic feet per minute (scfm) of landfill gas, constructed in 2002.
- (e)(d) One (1) temporary open flare, with a maximum heat input capacity of 49.0 MMBtu per hour and a maximum flow rate of 1,362 standard cubic feet per minute (scfm) of landfill gas.
- (e) One (1) temporary open flare, with a maximum heat input capacity of 49.0 MMBtu per hour and a maximum flow rate of 1,362 standard cubic feet per minute (scfm) of landfill gas, installed in March 2003, to be removed upon approval of one (1) replacement flare.

#### SECTION D.1 FACILITY OPERATION CONDITIONS

#### Facility Description [326 IAC 2-7-5(15)]

- (a) One (1) solid waste disposal facility having the meaning described in 40 CFR 60.751 pertaining to all contiguous land and structures, other appurtenances (including haul roads), and improvements on the land used for disposal of solid waste that opened in 1980 and has a design capacity of 8,257,892 Megagrams.
- (b) One (1) flare with a capacity of 30 MMBtu per hour, constructed in 1994. Removed from service.
- (c)(b) Three (3) landfill gas fueled reciprocating engine/generator sets rated at 1138 break horsepower each, installed in 1994, and one (1) landfill gas fueled reciprocating engine/generator set rated at 1138 break horsepower, installed in 2001.
- (d)(c) One (1) open flare, with a maximum heat input capacity of 65.1 MMBtu per hour and the flow rate of 2,130 standard cubic feet per minute (scfm) of landfill gas, constructed in 2002.
- (e)(d) One (1) temporary open flare, with a maximum heat input capacity of 49.0 MMBtu per hour and a maximum flow rate of 1,362 standard cubic feet per minute (scfm) of landfill gas.
- (e) One (1) temporary open flare, with a maximum heat input capacity of 49.0 MMBtu per hour and a maximum flow rate of 1,362 standard cubic feet per minute (scfm) of landfill gas, installed in March 2003, to be removed upon approval of one (1) replacement flare.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

#### D.1.5 Operational Standards for Collection and Control Systems [40 CFR 60.753]

In order to comply with 40 CFR 60.752 (b)(2)(ii) the Permittee shall:

(c) Operate each interior wellhead in the collection system with a landfill gas temperature less than 55EC (except for the Gas Well #55 shall operate less than 60EC (140EF)) and with either a nitrogen level less than 20 percent or an oxygen level less than 5 percent. The Permittee may establish a higher operating temperature, nitrogen, or oxygen value at a particular well. A higher operating value demonstration shall show supporting data that the elevated parameter does not cause fires or significantly inhibit anaerobic decomposition by killing methanogens.

All other conditions of the permit shall remain unchanged and in effect. Please attach a copy of this amendment and the following revised permit pages to the front of the original permit.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact James Farrell, at (800) 451-6027, press 0 and ask for James Farrell or extension 3-8396, or dial (317) 233-8396.

Sincerely, Signed by

Paul Dubenetzky, Chief Permits Branch Office of Air Quality

#### Attachments

JF

cc: File - LaPorte County

LaPorte County Health Department

Northwest Regional Office

Air Compliance Section Inspector - Letty Zepeda

Compliance Data Section - Karen Ampil

Administrative and Development - Delisa Lee

Technical Support and Modeling - Michele Boner

# PART 70 OPERATING PERMIT OFFICE OF AIR QUALITY

### Deercroft Recycling & Disposal Facility 10501 W. 300 North Michigan City, Indiana 46360

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 and 326 IAC 2-1-3.2 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T091-7519-00067	
Issued by: Janet G. McCabe, Assistant Commissioner Office of Air Quality	Issuance Date: July 12, 1999 Expiration Date: July 12, 2004

First Reopening No.: R091-13376-00067, issued January 7, 2002
First Significant Permit Modification No.: 091-16123-00067, issued October 16, 2002
Second Minor Source Modification No.: 091-16642-00067, issued March 18, 2003
Second Significant Permit Modification No.: 091-17127-00067, pending

First Administrative Amendment No.: 091-16944-00067	Pages Affected: 5, 27, 28,
Issued by: Signed by Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: May 12, 2003

Page 5 of 50 T091-7519-00067

#### **SECTION A**

#### **SOURCE SUMMARY**

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

#### A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

The Permittee owns and operates a stationary municipal solid waste landfill (MSLWLF)

Responsible Official: District Manager

Source Address: 10501 W. 300 North, Michigan City, Indiana 46360 Mailing Address: 10501 W. 300 North, Michigan City, Indiana 46360

SIC Code: 4953 County Location: LaPorte

County Status: Attainment for all criteria pollutants

Source Status: Part 70 Permit Program

Major Source, under PSD Rules

Major Source, Section 112 of the Clean Air Act

Not 1 of 28 Source Categories

### A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source consists of the following emission units:

- (a) One (1) solid waste disposal facility having the meaning described in 40 CFR 60.751 pertaining to all contiguous land and structures, other appurtenances (including haul roads), and improvements on the land used for disposal of solid waste that opened in 1980 and has a design capacity of 8,257,892 Megagrams.
- (b) Three (3) landfill gas fueled reciprocating engine/generator sets rated at 1138 break horsepower each, installed in 1994, and one (1) landfill gas fueled reciprocating engine/generator set rated at 1138 break horsepower, installed in 2001.
- (c) One (1) open flare, with a maximum heat input capacity of 65.1 MMBtu per hour and the flow rate of 2,130 standard cubic feet per minute (scfm) of landfill gas, constructed in 2002.
- (d) One (1) temporary open flare, with a maximum heat input capacity of 49.0 MMBtu per hour and a maximum flow rate of 1,362 standard cubic feet per minute (scfm) of landfill gas.
- (e) One (1) temporary open flare, with a maximum heat input capacity of 49.0 MMBtu per hour and a maximum flow rate of 1,362 standard cubic feet per minute (scfm) of landfill gas, installed in March 2003, to be removed upon approval of one (1) replacement flare.

## A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

- (a) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment.
- (b) Space heaters, process heaters, or boilers using the following fuels:

#### **SECTION D.1**

#### **FACILITY OPERATION CONDITIONS**

#### Facility Description [326 IAC 2-7-5(15)]

- (a) One (1) solid waste disposal facility having the meaning described in 40 CFR 60.751 pertaining to all contiguous land and structures, other appurtenances (including haul roads), and improvements on the land used for disposal of solid waste that opened in 1980 and has a design capacity of 8,257,892 Megagrams.
- (b) Three (3) landfill gas fueled reciprocating engine/generator sets rated at 1138 break horsepower each, installed in 1994, and one (1) landfill gas fueled reciprocating engine/generator set rated at 1138 break horsepower, installed in 2001.
- (c) One (1) open flare, with a maximum heat input capacity of 65.1 MMBtu per hour and the flow rate of 2,130 standard cubic feet per minute (scfm) of landfill gas, constructed in 2002.
- (d) One (1) temporary open flare, with a maximum heat input capacity of 49.0 MMBtu per hour and a maximum flow rate of 1,362 standard cubic feet per minute (scfm) of landfill gas.
- (e) One (1) temporary open flare, with a maximum heat input capacity of 49.0 MMBtu per hour and a maximum flow rate of 1,362 standard cubic feet per minute (scfm) of landfill gas, installed in March 2003, to be removed upon approval of one (1) replacement flare.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

#### Emission Limitations and Standards [326 IAC 2-7-5(1)]

- D.1.1 General Provisions Relating to NSPS [326 IAC 12-1][40 CFR Part 60, Subpart A] and to HAPs [326 IAC 14-1-1][40 CFR Part 61, Subpart A] [326 IAC 20-1-1] [40 CFR 63, Subpart A]
  - (a) The provisions of 40 CFR Part 60, Subpart A General Provisions, which are incorporated by reference in 326 IAC 12-1, apply to the facility described in this section except when otherwise specified in 40 CFR Part 60, Subpart WWW.
  - (b) The provisions of 40 CFR Part 61, Subpart A General Provisions, which are incorporated as 326 IAC 14-1-1, apply to the facility described in this section except when otherwise specified in 40 CFR Part 61, Subpart M.
  - (c) The provisions of 40 CFR Part 63, Subpart A General Provisions, which are incorporated by reference in 326 IAC 20-1-1, apply to the facility described in this section except when otherwise specified in 40 CFR Part 63, Subpart AAAA.

#### D.1.2 Non-applicability Determination

The municipal solid waste landfill is not subject to the provisions of the following 40 CFR Part 60 Subparts: Cc, D, Da, Db, Dc, E, Ea, Eb, K, Ka, Kb, O, GG, and OOO.

- D.1.3 Municipal Solid Waste Landfill NSPS [326 IAC 12] [40 CFR 60.752, Subpart WWW]

  The municipal solid waste landfill has a design capacity greater than 2.5 million megagrams (Mg) and shall comply with 40 CFR 60.752 (b)(2).
- D.1.4 Municipal Solid Waste Landfill NESHAP [326 IAC 20] [40 CFR 63, Subpart AAAA]

  The municipal solid waste landfill has a design capacity greater than 2.5 million megagrams (Mg) and has estimated uncontrolled emissions greater than 50 Mg/yr. Therefore, this landfill shall comply with 40 CFR 63, Subpart AAAA.
- D.1.5 Operational Standards for Collection and Control Systems [40 CFR 60.753] In order to comply with 40 CFR 60.752 (b)(2)(ii) the Permittee shall:

- (a) Operate the collection system such that gas is collected from each area, cell, or group of cells in the municipal solid waste landfill in which solid waste has been in place for five years if active or 2 years or more if closed or at final grade.
- (b) Operate the collection system with negative pressure at each wellhead except under the following conditions:
  - (1) Fire or increased well temperature. The Permittee shall record instances when positive pressure occurs in efforts to avoid a fire. These records shall be submitted with the annual reports as provided in 40 CFR 60.757(f)(1).
  - (2) Use of a geomembrane or synthetic cover. The Permittee shall develop acceptable pressure limits in the design plan.
  - (3) A decommissioned well. A well may experience a static positive pressure after shut down to accommodate for declining flows. All design changes shall be approved by the Office of Air Quality (OAQ).
- (c) Operate each interior wellhead in the collection system with a landfill gas temperature less than 55EC (except for the Gas Well #55 shall operate less than 60EC (140EF)) and with either a nitrogen level less than 20 percent or an oxygen level less than 5 percent. The Permittee may establish a higher operating temperature, nitrogen, or oxygen value at a particular well. A higher operating value demonstration shall show supporting data that the elevated parameter does not cause fires or significantly inhibit anaerobic decomposition by killing methanogens.
  - (1) The nitrogen level shall be determined using Method 3C, unless an alternative method is established as allowed by 40 CFR 60.752 (b)(2)(i).
  - (2) Unless an alternative test method is established as allowed by 40 CFR 60.752 (b)(2)(i), the oxygen shall be determined by an oxygen meter using Method 3A except that; the span shall be set so that the regulatory limit is between 20 and 50 percent of the span; a data recorder is not required; only two calibration gases are required, a zero and span, and ambient air may be used as the span; a calibration error check is not required; the allowable sample bias, zero drift, and calibration drift are ±10 percent.
- (d) Operate the collection system so that the methane concentration is less than 500 parts per million above background at the surface of the landfill. To determine if this level is exceeded, the Permittee shall conduct surface testing around the perimeter of the collection area and along a pattern that traverses the landfill at 30 meter intervals and where visual observations indicate elevated concentrations of landfill gas, such as distressed vegetation and cracks or seeps in the cover. The Permittee may establish an alternative traversing pattern that ensures equivalent coverage. A surface monitoring design plan shall be developed that includes a topographical map with the monitoring route and the rationale for any site-specific deviations from the 30 meter intervals. Areas with steep slopes or other dangerous areas may be excluded from the surface testing.
- (e) Operate the system such that all collected gases are vented to a control system designed and operated in compliance with 40 CFR 60.752(b)(2)(iii). In the event the collection or control system is inoperable, the gas mover system shall be shut down and all valves in the collection and control system contributing to venting of the gas to the atmosphere shall be closed within one hour.
- (f) Operate the control system at all times when the collected gas is routed to the system.